

SEQUENCE LISTING

<110> Hirata, Yuichi
Nezu, Junichi

<120> Novel VEGF-like Factor

<130> 50026/014001

<140> 09/214,982

<141> 1999-01-14

<150> 8-185216 Japan

<151> 1996-07-15

<160> 34

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 354

<212> PRT

<213> Homo sapiens

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Ser	Leu	Glu	Glu	Leu	Leu	Arg	Ile	Thr	His	Ser	Glu	Asp	Trp	Lys	Leu
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Trp	Arg	Cys	Arg	Leu	Arg	Leu	Lys	Ser	Phe	Thr	Ser	Met	Asp	Ser	Arg
65				70					75					80	
Ser	Ala	Ser	His	Arg	Ser	Thr	Arg	Phe	Ala	Ala	Thr	Phe	Tyr	Asp	Ile
			85					90					95		
Glu	Thr	Leu	Lys	Val	Ile	Asp	Glu	Glu	Trp	Gln	Arg	Thr	Gln	Cys	Ser
		100						105					110		
Pro	Arg	Glu	Thr	Cys	Val	Glu	Val	Ala	Ser	Glu	Leu	Gly	Lys	Ser	Thr
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Asn	Thr	Phe	Phe	Lys	Pro	Pro	Cys	Val	Asn	Val	Phe	Arg	Cys	Gly	Gly
	130					135					140				
Cys	Cys	Asn	Glu	Glu	Ser	Leu	Ile	Cys	Met	Asn	Thr	Ser	Thr	Ser	Tyr
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Ile	Ser	Lys	Gln	Leu	Phe	Glu	Ile	Ser	Val	Pro	Leu	Thr	Ser	Val	Pro
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Glu	Leu	Val	Pro	Val	Lys	Val	Ala	Asn	His	Thr	Gly	Cys	Lys	Cys	Leu
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Pro Thr Ala Pro Arg His Pro Tyr Ser Ile Ile Arg Arg Ser Ile Gln
 195 200 205
 Ile Pro Glu Glu Asp Arg Cys Ser His Ser Lys Lys Leu Cys Pro Ile
 210 215 220
 Asp Met Leu Trp Asp Ser Asn Lys Cys Lys Cys Val Leu Gln Glu Glu
 225 230 235 240
 Asn Pro Leu Ala Gly Thr Glu Asp His Ser His Leu Gln Glu Pro Ala
 245 250 255
 Leu Cys Gly Pro His Met Met Phe Asp Glu Asp Arg Cys Glu Cys Val
 260 265 270
 Cys Lys Thr Pro Cys Pro Lys Asp Leu Ile Gln His Pro Lys Asn Cys
 275 280 285
 Ser Cys Phe Glu Cys Lys Glu Ser Leu Glu Thr Cys Cys Gln Lys His
 290 295 300
 Lys Leu Phe His Pro Asp Thr Cys Ser Cys Glu Asp Arg Cys Pro Phe
 305 310 315 320
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 Asn Pro

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 atgtcaactg cttagtaatc agtggatatt gaaatattca aa atg tac aga gag 414
 Met Tyr Arg Glu
 1

tgg gta gtg gtg aat gtt ttc atg atg ttg tac gtc cag ctg gtg cag 462
 Trp Val Val Val Asn Val Phe Met Met Leu Tyr Val Gln Leu Val Gln
 5 10 15 20

ggc tcc agt aat gaa cat gga cca gtg aag cga tca tct cag tcc aca 510
 Gly Ser Ser Asn Glu His Gly Pro Val Lys Arg Ser Ser Gln Ser Thr
 25 30 35

ttg gaa cga tct gaa cag cag atc agg gct gct tct agt ttg gag gaa	558
Leu Glu Arg Ser Glu Gln Gln Ile Arg Ala Ala Ser Ser Leu Glu Glu	
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cta ctt cga att act cac tct gag gac tgg aag ctg tgg aga tgc agg	606
Leu Leu Arg Ile Thr His Ser Glu Asp Trp Lys Leu Trp Arg Cys Arg	
55 60 65	
ctg agg ctc aaa agt ttt acc agt atg gac tct cgc tca gca tcc cat	654
Leu Arg Leu Lys Ser Phe Thr Ser Met Asp Ser Arg Ser Ala Ser His	
70 75 80	
cgg tcc act agg ttt gcg gca act ttc tat gac att gaa aca cta aaa	702
Arg Ser Thr Arg Phe Ala Ala Thr Phe Tyr Asp Ile Glu Thr Leu Lys	
85 90 95 100	
gtt ata gat gaa gaa tgg caa aga act cag tgc agc cct aga gaa acg	750
Val Ile Asp Glu Glu Trp Gln Arg Thr Gln Cys Ser Pro Arg Glu Thr	
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Cys Val Glu Val Ala Ser Glu Leu Gly Lys Ser Thr Asn Thr Phe Phe	
120 125 130	
aag ccc cct tgt gtg aac gtg ttc cga tgt ggt ggc tgt tgc aat gaa	846
Lys Pro Pro Cys Val Asn Val Phe Arg Cys Gly Gly Cys Cys Asn Glu	
135 140 145	
gag agc ctt atc tgt atg aac acc agc acc tcg tac att tcc aaa cag	894
Glu Ser Leu Ile Cys Met Asn Thr Ser Thr Ser Tyr Ile Ser Lys Gln	
150 155 160	
ctc ttt gag ata tca gtg cct ttg aca tca gta cct gaa tta gtg cct	942
Leu Phe Glu Ile Ser Val Pro Leu Thr Ser Val Pro Glu Leu Val Pro	
165 170 175 180	
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Val Lys Val Ala Asn His Thr Gly Cys Lys Cys Leu Pro Thr Ala Pro	
185 190 195	
cgc cat cca tac tca att atc aga aga tcc atc cag atc cct gaa gaa	1038
Arg His Pro Tyr Ser Ile Ile Arg Arg Ser Ile Gln Ile Pro Glu Glu	
200 205 210	
gat cgc tgt tcc cat tcc aag aaa ctc tgt cct att gac atg cta tgg	1086
Asp Arg Cys Ser His Ser Lys Lys Leu Cys Pro Ile Asp Met Leu Trp	
215 220 225	
gat agc aac aaa tgt aaa tgt gtt ttg cag gag gaa aat cca ctt gct	1134
Asp Ser Asn Lys Cys Lys Cys Val Leu Gln Glu Glu Asn Pro Leu Ala	
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 Gly Thr Glu Asp His Ser His Leu Gln Glu Pro Ala Leu Cys Gly Pro
 245 250 255 260

cac atg atg ttt gac gaa gat cgt tgc gag tgt gtc tgt aaa aca cca 1230
 His Met Met Phe Asp Glu Asp Arg Cys Glu Cys Val Cys Lys Thr Pro
 265 270 275

tgt ccc aaa gat cta atc cag cac ccc aaa aac tgc agt tgc ttt gag 1278
 Cys Pro Lys Asp Leu Ile Gln His Pro Lys Asn Cys Ser Cys Phe Glu
 280 285 290

tgc aaa gaa agt ctg gag acc tgc tgc cag aag cac aag cta ttt cac 1326
 Cys Lys Glu Ser Leu Glu Thr Cys Cys Gln Lys His Lys Leu Phe His
 295 300 305

cca gac acc tgc agc tgt gag gac aga tgc ccc ttt cat acc aga cca 1374
 Pro Asp Thr Cys Ser Cys Glu Asp Arg Cys Pro Phe His Thr Arg Pro
 310 315 320

tgt gca agt ggc aaa aca gca tgt gca aag cat tgc cgc ttt cca aag 1422
 Cys Ala Ser Gly Lys Thr Ala Cys Ala Lys His Cys Arg Phe Pro Lys
 325 330 335 340

gag aaa agg gct gcc cag ggg ccc cac agc cga aag aat cct 1464
 Glu Lys Arg Ala Ala Gln Gly Pro His Ser Arg Lys Asn Pro
 345 350

tgattcagcg ttccaagttc cccatccctg tcatttttaa cagcatgctg ctttgccaag 1524
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 tatgatcagt actgactttc tgattactgt ccagcttata gtcttcagat ttaatgaact 1944
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<211> 27

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<223> Synthetic DNA

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actcactata gggctcgagc ggc 23

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20

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<223> Synthetic DNA

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<210> 23

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33

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 Met Tyr Gly Glu Trp Gly
 1 5
 atg ggg aat atc ctc atg atg ttc cat gtg tac ttg gtg cag ggc ttc 161
 Met Gly Asn Ile Leu Met Met Phe His Val Tyr Leu Val Gln Gly Phe
 10 15 20
 agg agc gaa cat gga cca gtg aag gat ttt tct ttt gag cga tca tcc 209
 Arg Ser Glu His Gly Pro Val Lys Asp Phe Ser Phe Glu Arg Ser Ser
 25 30 35
 cgg tcc atg ttg gaa cga tct gaa caa cag atc cga gca gct tct agt 257
 Arg Ser Met Leu Glu Arg Ser Glu Gln Gln Ile Arg Ala Ala Ser Ser
 40 45 50
 ttg gag gag ttg ctg caa atc gcg cac tct gag gac tgg aag ctg tgg 305
 Leu Glu Glu Leu Leu Gln Ile Ala His Ser Glu Asp Trp Lys Leu Trp
 55 60 65 70
 cga tgc cgg ttg aag ctc aaa agt ctt gcc agt atg gac tca cgc tca 353
 Arg Cys Arg Leu Lys Leu Lys Ser Leu Ala Ser Met Asp Ser Arg Ser
 75 80 85
 gca tcc cat cgc tcc acc aga ttt gcg gca act ttc tat gac act gaa 401
 Ala Ser His Arg Ser Thr Arg Phe Ala Ala Thr Phe Tyr Asp Thr Glu

90 95 100

aca cta aaa gtt ata gat gaa gaa tgg cag agg acc caa tgc agc cct 449
 Thr Leu Lys Val Ile Asp Glu Glu Trp Gln Arg Thr Gln Cys Ser Pro
 105 110 115

aga gag aca tgc gta gaa gtc gcc agt gag ctg ggg aag aca acc aac 497
 Arg Glu Thr Cys Val Glu Val Ala Ser Glu Leu Gly Lys Thr Thr Asn
 120 125 130

aca ttc ttc aag ccc ccc tgt gta aat gtc ttc cgg tgt gga ggc tgc 545
 Thr Phe Phe Lys Pro Pro Cys Val Asn Val Phe Arg Cys Gly Gly Cys
 135 140 145 150

tgc aac gaa gag ggt gtg atg tgt atg aac aca agc acc tcc tac atc 593
 Cys Asn Glu Glu Gly Val Met Cys Met Asn Thr Ser Thr Ser Tyr Ile
 155 160 165

tcc aaa cag ctc ttt gag ata tca gtg cct ctg aca tca gtg ccc gag 641
 Ser Lys Gln Leu Phe Glu Ile Ser Val Pro Leu Thr Ser Val Pro Glu
 170 175 180

tta gtg cct gtt aaa att gcc aac cat acg ggt tgt aag tgc ttg ccc 689
 Leu Val Pro Val Lys Ile Ala Asn His Thr Gly Cys Lys Cys Leu Pro
 185 190 195

acg ggc ccc cgc cat cct tac tca att atc aga aga tcc att cag acc 737
 Thr Gly Pro Arg His Pro Tyr Ser Ile Ile Arg Arg Ser Ile Gln Thr
 200 205 210

cca gaa gaa gat gaa tgt cct cat tcc aag aaa ctc tgt cct att gac 785
 Pro Glu Glu Asp Glu Cys Pro His Ser Lys Lys Leu Cys Pro Ile Asp
 215 220 225 230

atg ctg tgg gat aac acc aaa tgt aaa tgt gtt ttg caa gac gag act 833
 Met Leu Trp Asp Asn Thr Lys Cys Lys Cys Val Leu Gln Asp Glu Thr
 235 240 245

cca ctg cct ggg aca gaa gac cac tct tac ctc cag gaa ccc act ctc 881
 Pro Leu Pro Gly Thr Glu Asp His Ser Tyr Leu Gln Glu Pro Thr Leu
 250 255 260

tgt gga ccg cac atg acg ttt gat gaa gat cgc tgt gag tgc gtc tgt 929
 Cys Gly Pro His Met Thr Phe Asp Glu Asp Arg Cys Glu Cys Val Cys
 265 270 275

aaa gca cca tgt ccg gga gat ctc att cag cac ccg gaa aac tgc agt 977
 Lys Ala Pro Cys Pro Gly Asp Leu Ile Gln His Pro Glu Asn Cys Ser
 280 285 290

tgc ttt gag tgc aaa gaa agt ctg gag agc tgc tgc caa aag cac aag 1025

Cys Phe Glu Cys Lys Glu Ser Leu Glu Ser Cys Cys Gln Lys His Lys
 295 300 305 310

att ttt cac cca gac acc tgc agc tgt gag gac aga tgt cct ttt cac 1073
 Ile Phe His Pro Asp Thr Cys Ser Cys Glu Asp Arg Cys Pro Phe His
 315 320 325

acc aga aca tgt gca agt aga aag cca gcc tgt gga aag cac tgg cgc 1121
 Thr Arg Thr Cys Ala Ser Arg Lys Pro Ala Cys Gly Lys His Trp Arg
 330 335 340

ttt cca aag gag aca agg gcc cag gga ctc tac agc cag gag aac cct 1169
 Phe Pro Lys Glu Thr Arg Ala Gln Gly Leu Tyr Ser Gln Glu Asn Pro
 345 350 355

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 caaaatatta ggtgccactc gattgggtcc ctggggctgg ccaaattcca agggcaatgc 1529
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 ttgcttcttg agaatgcctt ttgcaacact ttccagtagc tgccctggaaa caactgctta 240
 gccatcagtg gacatttgaa atattcaaa atg tat gga gag tgg gcc gca gtg 293
 Met Tyr Gly Glu Trp Ala Ala Val
 1 5

aat att ctc atg atg tcc tat gtg tac ctg gtg cag ggc ttc agt att 341
 Asn Ile Leu Met Met Ser Tyr Val Tyr Leu Val Gln Gly Phe Ser Ile
 10 15 20

gaa cac cga gca gtg aag gat gtt tct ctt gag cga tca tcc cgg tct 389
 Glu His Arg Ala Val Lys Asp Val Ser Leu Glu Arg Ser Ser Arg Ser
 25 30 35 40

gtg ttg gaa cgt tct gaa caa cag atc cgc gcg gct tct act ttg gaa 437
 Val Leu Glu Arg Ser Glu Gln Gln Ile Arg Ala Ala Ser Thr Leu Glu

45 50 55

gag ttg ctg caa gtc gca cac tct	gag gac tgg aag ctg tgg cgg tgc	485
Glu Leu Leu Gln Val Ala His Ser	Glu Asp Trp Lys Leu Trp Arg Cys	
60	65	70
cgg ttg aag ctt aaa agt ctt gcc aat gtg gac tcg cgc tca aca tcc	533	
Arg Leu Lys Leu Lys Ser Leu Ala Asn Val Asp Ser Arg Ser Thr Ser		
75	80	85
cat cgc tcc acc aga ttt gcg gca act ttc tat gat act gaa aca cta	581	
His Arg Ser Thr Arg Phe Ala Ala Thr Phe Tyr Asp Thr Glu Thr Leu		
90	95	100
aaa gtt ata gat gaa gaa tgg cag agg acc caa tgc agc cct aga gag	629	
Lys Val Ile Asp Glu Glu Trp Gln Arg Thr Gln Cys Ser Pro Arg Glu		
105	110	115
aca tgc gta gaa gtc gcc agt gag ctg ggg aag aca acc aac aca ttt	677	
Thr Cys Val Glu Val Ala Ser Glu Leu Gly Lys Thr Thr Asn Thr Phe		
125	130	135
ttc aag ccc cct tgt gta aat gtc ttc cgg tgt gga gga tgc tgc aat	725	
Phe Lys Pro Pro Cys Val Asn Val Phe Arg Cys Gly Gly Cys Cys Asn		
140	145	150
gaa gag agc gtg atg tgt atg aac aca agc acc tcc tac atc tcc aaa	773	
Glu Glu Ser Val Met Cys Met Asn Thr Ser Thr Ser Tyr Ile Ser Lys		
155	160	165
cag ctg ttt gag ata tca gtg cct ctg aca tca gtg ccc gag tta gtg	821	
Gln Leu Phe Glu Ile Ser Val Pro Leu Thr Ser Val Pro Glu Leu Val		
170	175	180
cct gtt aaa att gcc aac cat acg ggt tgt aag tgt ttg ccc acg ggc	869	
Pro Val Lys Ile Ala Asn His Thr Gly Cys Lys Cys Leu Pro Thr Gly		
185	190	195
ccc cgg cat cct tat tca att atc aga aga tcc att cag atc cca gaa	917	
Pro Arg His Pro Tyr Ser Ile Ile Arg Arg Ser Ile Gln Ile Pro Glu		
205	210	215
gaa gat caa tgt cct cat tcc aag aaa ctg tgc cct gtt gac atg ctg	965	
Glu Asp Gln Cys Pro His Ser Lys Lys Leu Cys Pro Val Asp Met Leu		
220	225	230
tgg gat aac acc aaa tgt aaa tgt gtt tta caa gat gag aat cca ctg	1013	
Trp Asp Asn Thr Lys Cys Lys Cys Val Leu Gln Asp Glu Asn Pro Leu		
235	240	245
cct ggg aca gaa gac cac tct tac ctg cag gaa ccc gct ctg tgc gga	1061	

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Pro Gly Thr Glu Asp His Ser Tyr Leu Gln Glu Pro Ala Leu Cys Gly	
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Pro His Met Met Phe Asp Glu Asp Arg Cys Glu Cys Val Cys Lys Ala	
265 270 275 280	
cca tgt cct gga gat ctc att cag cac ccg gaa aac tgc agt tgc ttt	1157
Pro Cys Pro Gly Asp Leu Ile Gln His Pro Glu Asn Cys Ser Cys Phe	
285 290 295	
gaa tgc aaa gaa agt ctg gaa agc tgt tgc caa aag cac aag atg ttt	1205
Glu Cys Lys Glu Ser Leu Glu Ser Cys Cys Gln Lys His Lys Met Phe	
300 305 310	
cac cct gac acc tgc aga tca atg gtc ttt tca ctg tcc cct	1247
His Pro Asp Thr Cys Arg Ser Met Val Phe Ser Leu Ser Pro	
315 320 325	
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 Gln His Pro Lys Asn Cys Ser Cys Phe Glu Cys Lys Glu Ser Leu Glu
 35 40 45
 Thr Cys Cys Gln Lys His Lys Leu Phe His Pro Asp Thr Cys Ser Cys
 50 55 60
 Glu Asp Arg Cys Pro Phe His Thr Arg Pro Cys Ala Ser Gly Lys Thr
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 Ala Cys Ala Lys His Cys Arg Phe Pro Lys Glu Lys Arg Ala Ala Gln
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 Gly Pro His Ser Arg Lys Asn Pro
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 Glu Ser Gly Leu Asp Leu Ser Asp Ala Glu Pro Asp Ala Gly Glu Ala
 35 40 45
 Thr Ala Tyr Ala Ser Lys Asp Leu Glu Phe Gln Leu Arg Ser Val Ser
 50 55 60
 Ser Val Asp Glu Leu Met Thr Val Leu Tyr Pro Glu Tyr Trp Lys Met
 65 70 75 80
 Tyr Lys Cys Gln Leu Arg Lys Gly Gly Trp Gln His Asn Arg Glu Gln
 85 90 95
 Ala Asn Leu Asn Ser Arg Thr Glu Glu Thr Ile Lys Phe Ala Ala Ala
 100 105 110
 His Tyr Asn Thr Glu Ile Leu Lys Ser Ile Asp Asn Glu Trp Arg Lys
 115 120 125
 Thr Gln Cys Met Pro Arg Glu Val Cys Ile Asp Val Gly Lys Glu Phe
 130 135 140
 Gly Val Ala Thr Asn Thr Phe Phe Lys Pro Pro Cys Val Ser Val Tyr
 145 150 155 160
 Arg Cys Gly Gly Cys Asn Ser Glu Gly Leu Gln Cys Met Asn Thr
 165 170 175
 Ser Thr Ser Tyr Leu Ser Lys Thr Leu Phe Glu Ile Thr Val Pro Leu
 180 185 190
 Ser Gln Gly Pro Lys Pro Val Thr Ile Ser Phe Ala Asn His Thr Ser
 195 200 205
 Cys Arg Cys Met Ser Lys Leu Asp Val Tyr Arg Gln Val His Ser Ile
 210 215 220
 Ile Arg Arg Ser Leu Pro Ala Thr Leu Pro Gln Cys Gln Ala Ala Asn

225 230 235 240
 Lys Thr Cys Pro Thr Asn Tyr Met Trp Asn Asn His Ile Cys Arg Cys
 245 250 255
 Leu Ala Gln Glu Asp Phe Met Phe Ser Ser Asp Ala Gly Asp Asp Ser
 260 265 270
 Thr Asp Gly Phe His Asp Ile Cys Gly Pro Asn Lys Glu Leu Asp Glu
 275 280 285
 Glu Thr Cys Gln Cys Val Cys Arg Ala Gly Leu Arg Pro Ala Ser Cys
 290 295 300
 Gly Pro His Lys Glu Leu Asp Arg Asn Ser Cys Gln Cys Val Cys Lys
 305 310 315 320
 Asn Lys Leu Phe Pro Ser Gln Cys Gly Ala Asn Arg Glu Phe Asp Glu
 325 330 335
 Asn Thr Cys Gln Cys Val Cys Lys Arg Thr Cys Pro Arg Asn Gln Pro
 340 345 350
 Leu Asn Pro Gly Lys Cys Ala Cys Glu Cys Thr Glu Ser Pro Gln Lys
 355 360 365
 Cys Leu Leu Lys Gly Lys Lys Phe His His Gln Thr Cys Ser Cys Tyr
 370 375 380
 Arg Arg Pro Cys Thr Asn Arg Gln Lys Ala Cys Glu Pro Gly Phe Ser
 385 390 395 400
 Tyr Ser Glu Glu Val Cys Arg Cys Val Pro Ser Tyr Trp Lys Arg Pro
 405 410 415
 Gln Met Ser

<210> 30
 <211> 211
 <212> PRT
 <213> Homo sapiens

<400> 30
 Met Arg Thr Leu Ala Cys Leu Leu Leu Leu Gly Cys Gly Tyr Leu Ala
 1 5 10 15
 His Val Leu Ala Glu Glu Ala Glu Ile Pro Arg Glu Val Ile Glu Arg
 20 25 30
 Leu Ala Arg Ser Gln Ile His Ser Ile Arg Asp Leu Gln Arg Leu Leu
 35 40 45
 Glu Ile Asp Ser Val Gly Ser Glu Asp Ser Leu Asp Thr Ser Leu Arg
 50 55 60
 Ala His Gly Val His Ala Thr Lys His Val Pro Phe Lys Arg Pro Leu
 65 70 75 80
 Pro Ile Arg Arg Lys Arg Ser Ile Glu Glu Ala Val Pro Ala Val Cys
 85 90 95
 Lys Thr Arg Thr Val Ile Tyr Glu Ile Pro Arg Ser Gln Val Asp Pro
 100 105 110
 Thr Ser Ala Asn Phe Leu Ile Trp Pro Pro Cys Val Glu Val Lys Arg
 115 120 125
 Cys Thr Gly Cys Cys Asn Thr Ser Ser Val Lys Cys Gln Pro Ser Arg
 130 135 140
 Val His His Arg Ser Val Lys Val Ala Lys Val Glu Tyr Val Arg Lys

145		150		155		160									
Lys	Pro	Lys	Leu	Lys	Glu	Val	Gln	Val	Arg	Leu	Glu	Glu	His	Leu	Glu
		165						170						175	
Cys	Ala	Cys	Ala	Thr	Thr	Ser	Leu	Asn	Pro	Asp	Tyr	Arg	Glu	Glu	Asp
		180						185						190	
Thr	Gly	Arg	Pro	Arg	Glu	Ser	Gly	Lys	Lys	Arg	Lys	Arg	Lys	Arg	Leu
		195					200						205		
Lys	Pro	Thr													
		210													

<210> 31
 <211> 241
 <212> PRT
 <213> Homo sapiens

Ala
cont.

<400> 31															
Met	Asn	Arg	Cys	Trp	Ala	Leu	Phe	Leu	Ser	Leu	Cys	Cys	Tyr	Leu	Arg
1			5						10					15	
Leu	Val	Ser	Ala	Glu	Gly	Asp	Pro	Ile	Pro	Glu	Glu	Leu	Tyr	Glu	Met
		20						25					30		
Leu	Ser	Asp	His	Ser	Ile	Arg	Ser	Phe	Asp	Asp	Leu	Gln	Arg	Leu	Leu
		35				40						45			
His	Gly	Asp	Pro	Gly	Glu	Glu	Asp	Gly	Ala	Glu	Leu	Asp	Leu	Asn	Met
	50				55					60					
Thr	Arg	Ser	His	Ser	Gly	Gly	Glu	Leu	Glu	Ser	Leu	Ala	Arg	Gly	Arg
65					70					75				80	
Arg	Ser	Leu	Gly	Ser	Leu	Thr	Ile	Ala	Glu	Pro	Ala	Met	Ile	Ala	Glu
			85						90					95	
Cys	Lys	Thr	Arg	Thr	Glu	Val	Phe	Glu	Ile	Ser	Arg	Arg	Leu	Ile	Asp
		100						105					110		
Arg	Thr	Asn	Ala	Asn	Phe	Leu	Val	Trp	Pro	Pro	Cys	Val	Glu	Val	Gln
		115					120					125			
Arg	Cys	Ser	Gly	Cys	Cys	Asn	Asn	Arg	Asn	Val	Gln	Cys	Arg	Pro	Thr
	130					135					140				
Gln	Val	Gln	Leu	Arg	Pro	Val	Gln	Val	Arg	Lys	Ile	Glu	Ile	Val	Arg
145					150					155				160	
Lys	Lys	Pro	Ile	Phe	Lys	Lys	Ala	Thr	Val	Thr	Leu	Glu	Asp	His	Leu
			165						170					175	
Ala	Cys	Lys	Cys	Glu	Thr	Val	Ala	Ala	Arg	Pro	Val	Thr	Arg	Ser	
		180						185					190		
Pro	Gly	Gly	Ser	Gln	Glu	Gln	Arg	Ala	Lys	Thr	Pro	Gln	Thr	Arg	Val
	195						200					205			
Thr	Ile	Arg	Thr	Val	Arg	Val	Arg	Arg	Pro	Pro	Lys	Gly	Lys	His	Arg
	210					215					220				
Lys	Phe	Lys	His	Thr	His	Asp	Lys	Thr	Ala	Leu	Lys	Glu	Thr	Leu	Gly
225					230					235				240	
Ala															

<210> 32
 <211> 170

<212> PRT
<213> Homo sapiens

<400> 32

Met Pro Val Met Arg Leu Phe Pro Cys Phe Leu Gln Leu Leu Ala Gly
1 5 10 15
Leu Ala Leu Pro Ala Val Pro Pro Gln Gln Trp Ala Leu Ser Ala Gly
20 25 30
Asn Gly Ser Ser Glu Val Glu Val Val Pro Phe Gln Phe Val Trp Gly
35 40 45
Arg Ser Tyr Cys Arg Ala Leu Glu Arg Leu Val Asp Val Val Ser Glu
50 55 60
Tyr Pro Ser Glu Val Glu His Met Phe Ser Pro Ser Cys Val Ser Leu
65 70 75 80
Leu Arg Cys Thr Gly Cys Cys Gly Asp Glu Asn Leu His Cys Val Pro
85 90 95
Val Glu Thr Ala Asn Val Thr Met Gln Leu Leu Lys Ile Arg Ser Gly
100 105 110
Asp Arg Pro Ser Tyr Val Glu Leu Thr Phe Ser Gln His Val Arg Cys
115 120 125
Glu Cys Arg Pro Leu Arg Glu Lys Met Lys Pro Glu Arg Arg Arg Pro
130 135 140
Lys Gly Arg Gly Lys Arg Arg Arg Glu Lys Gln Arg Pro Thr Asp Cys
145 150 155 160
His Leu Cys Gly Asp Ala Val Pro Arg Arg
165 170

<210> 33
<211> 232
<212> PRT
<213> Homo sapiens

<400> 33

Met Asn Phe Leu Leu Ser Trp Val His Trp Ser Leu Ala Leu Leu Leu
1 5 10 15
Tyr Leu His His Ala Lys Trp Ser Gln Ala Ala Pro Met Ala Glu Gly
20 25 30
Gly Gly Gln Asn His His Glu Val Val Lys Phe Met Asp Val Tyr Gln
35 40 45
Arg Ser Tyr Cys His Pro Ile Glu Thr Leu Val Asp Ile Phe Gln Glu
50 55 60
Tyr Pro Asp Glu Ile Glu Tyr Ile Phe Lys Pro Ser Cys Val Pro Leu
65 70 75 80
Met Arg Cys Gly Gly Cys Cys Asn Asp Glu Gly Leu Glu Cys Val Pro
85 90 95
Thr Glu Glu Ser Asn Ile Thr Met Gln Ile Met Arg Ile Lys Pro His
100 105 110
Gln Gly Gln His Ile Gly Glu Met Ser Phe Leu Gln His Asn Lys Cys
115 120 125
Glu Cys Arg Pro Lys Lys Asp Arg Ala Arg Gln Glu Lys Lys Ser Val
130 135 140

Arg	Gly	Lys	Gly	Lys	Gly	Gln	Lys	Arg	Lys	Arg	Lys	Lys	Ser	Arg	Tyr
145					150					155					160
Lys	Ser	Trp	Ser	Val	Tyr	Val	Gly	Ala	Arg	Cys	Cys	Leu	Met	Pro	Trp
				165					170					175	
Ser	Leu	Pro	Gly	Pro	His	Pro	Cys	Gly	Pro	Cys	Ser	Glu	Arg	Arg	Lys
			180					185					190		
His	Leu	Phe	Val	Gln	Asp	Pro	Gln	Thr	Cys	Lys	Cys	Ser	Cys	Lys	Asn
		195					200					205			
Thr	Asp	Ser	Arg	Cys	Lys	Ala	Arg	Gln	Leu	Glu	Leu	Asn	Glu	Arg	Thr
	210						215				220				
Cys	Arg	Cys	Asp	Lys	Pro	Arg	Arg								
225					230										

<210> 34
 <211> 188
 <212> PRT
 <213> Homo sapiens

<400> 34

Met	Ser	Pro	Leu	Leu	Arg	Arg	Leu	Leu	Leu	Ala	Ala	Leu	Leu	Gln	Leu
1				5					10					15	
Ala	Pro	Ala	Gln	Ala	Pro	Val	Ser	Gln	Pro	Asp	Ala	Pro	Gly	His	Gln
			20					25					30		
Arg	Lys	Val	Val	Ser	Trp	Ile	Asp	Val	Tyr	Thr	Arg	Ala	Thr	Cys	Gln
		35					40					45			
Pro	Arg	Glu	Val	Val	Val	Pro	Leu	Thr	Val	Glu	Leu	Met	Gly	Thr	Val
	50					55				60					
Ala	Lys	Gln	Leu	Val	Pro	Ser	Cys	Val	Thr	Val	Gln	Arg	Cys	Gly	Gly
65					70					75					80
Cys	Cys	Pro	Asp	Asp	Gly	Leu	Glu	Cys	Val	Pro	Thr	Gly	Gln	His	Gln
				85					90					95	
Val	Arg	Met	Gln	Ile	Leu	Met	Ile	Arg	Tyr	Pro	Ser	Ser	Gln	Leu	Gly
			100					105					110		
Glu	Met	Ser	Leu	Glu	Glu	His	Ser	Gln	Cys	Glu	Cys	Arg	Pro	Lys	Lys
		115					120					125			
Lys	Asp	Ser	Ala	Val	Lys	Pro	Asp	Ser	Pro	Arg	Pro	Leu	Cys	Pro	Arg
	130					135					140				
Cys	Thr	Gln	His	His	Gln	Arg	Pro	Asp	Pro	Arg	Thr	Cys	Arg	Cys	Arg
145					150					155					160
Cys	Arg	Arg	Arg	Ser	Phe	Leu	Arg	Cys	Gln	Gly	Arg	Gly	Leu	Glu	Leu
				165					170					175	
Asn	Pro	Asp	Thr	Cys	Arg	Cys	Arg	Lys	Leu	Arg	Arg				
			180					185							